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Strategic Alignment: What Is Really Being Aligned?

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ABSTRACT
Over the years, aligning IT and business strategies has remained an important, but sometimes elusive, challenge for executives. At the same time it has garnered quite an interest among the research community. This paper seeks to provide one explanation why alignment efforts struggle. The paper first addresses the distinction between strategies as plans and strategies as patterns in decisions and actions based on a multiple case study in the financial industry. By separating intended and realized strategies, alignment can then be discussed not only in traditional terms of closing a gap, but also in terms of what is really being aligned? It is argued that alignment efforts and alignment research often are occupied with aligning intended strategies disregarding potential differences between what is intended and what is realized. It is suggested that an increased focus on realized strategies may be beneficial for alignment efforts.

Keywords
IT strategy, business strategy, alignment.

INTRODUCTION
The need to plan the use of IT has long been established (McFarlan, 1971; King, 1978). The process of Strategic Information Systems Planning (SISP) has been defined as “the process of deciding the objectives for organizational computing and identifying potential computer applications which the organization should implement” (Lederer and Sethi, 1988, p. 445). To an organization SISP normally means carrying out a major, intensive study (Lederer and Sethi, 1996), and it should not come as a surprise that a major problem with SISP reported by Lederer and Sethi (1988) is lack of resources. Note that this does not refer to lack of resources for strategic IS but for strategic IS planning.

The importance of linking or aligning IT strategies to business strategies, see Figure 1, was identified early on (Hartog and Herbert, 1986; Ward, 1987). Research on this linkage has largely been based upon questionnaires and quantitative analyses (e.g. Teo and King, 1997).

Earl (1989) points to the mutual dependency between business strategy and IT strategy as IT can support the business strategy, but it can also create strategic options. Hence, he continues “we can state that no business strategy is complete without reference to IT strategy. Conversely, no IT strategic planning is robust unless it is connected to business strategy.” (ibid., p. 62). There have also been (somewhat unanswered) calls for linking the research on strategic use of IT to existing bodies of theory. Bakos and Treacy claim that “Much of the current work on the strategic impacts of information technology, despite dramatic references to ‘strategic tools’ and ‘competitive weapons’ makes little or no use of bodies of theory related to either strategy or competition” (Bakos and Treacy, 1986, p. 117). They continue by identifying the danger that not using insights from established reference disciplines can lead to idiosyncratic theories of the strategic use of information systems.

Despite intentions to link business and IT strategies, in real life the notion of a “gap” between IT and the business is common (e.g. Peppard and Ward, 1999; Ward and Peppard, 1996). This entices important questions such as where this gap comes from and why it exists. Most companies would probably agree that having tightly linked IT and business strategies is preferable, but achieving such linkages seems to be a difficult thing to do. Dealing with this potential gap calls for a continuous consideration of the relationship between IT and the business. A common explanation concerns lack of understanding, the business organization’s failure to understand IT and the IT organization’s failure to understand the business.
Building on an emergent view on strategies this paper seeks to provide one explanation why alignment efforts struggle. The proposition is that an awareness of what is really typically being aligned may suggest a broader view on strategy alignment. To accomplish this, business strategies will first be discussed followed by a brief introduction to IT strategies. Based on an empirical study the existence of different kinds of strategies will be explored. The paper concludes with presenting a model highlighting what is really being aligned.

ALIGNING STRATEGIES

Business strategies

[All strategies are abstractions which exist only in the minds of interested parties [...] It is important to remember that no-one has ever seen a strategy or touched one; every strategy is an invention, a figment of someone’s imagination, whether conceived of as intentions to regulate behavior before it takes place or inferred as patterns to describe behavior that has already occurred. (Mintzberg, 1987, p. 16)]

The area of strategic management is filled with different schools with different views on the world in general and on strategies in particular (see Mintzberg, Ahlstrand and Lampel, 1998). The view on strategies used in this paper adheres to the learning school, of which Mintzberg is a major proponent. This school is characterized by having an emergent view on strategies. This can be compared with for example the positioning school illustrated by Porter (1980) which describes competitive strategy as “taking offensive or defensive actions to create a defendable position in an industry” (p. 34).

According to Mintzberg (1978) “strategic change can be viewed as the organization’s response to environmental change, constrained by the momentum of the bureaucracy and accelerated or dampened by the leadership” (p. 941). Such potential implementation difficulties support the distinction between deliberate and emergent strategies, see Figure 2 (Mintzberg, 1978; Mintzberg and Waters, 1985).

![Figure 2. Types of Strategies (Mintzberg and Waters, 1985)](image)

When studying realized strategies, Mintzberg (1978) focuses on patterns in decisions as he states that: “Strategy in general, and realized strategy in particular, will be defined as a pattern in a stream of decisions” [emphasis in original] (p. 935), where a decision is defined as a commitment to action (usually by committing resources) (cf. Mintzberg, Raisinghani and Theoret, 1976). As discussed above, pattern relates to “consistency in behavior, whether or not intended” [emphasis in original] (Mintzberg, 1987, p. 12); this is an important distinction as patterns in general can take on any shape whatsoever. An example of a Realized focus is provided by Pettigrew (1985), as he takes strategy to mean “that which is realised in practice through consistency in a stream of actions and decisions over time” (p. 438). Thus, he is not concerned with what is intended but instead what is realized.

IT Strategies

IT strategy is a broad concept and Earl (1989) distinguishes between three different levels of strategies: IS strategy, IT strategy and IM (Information Management) strategy. The IS strategy deals with aligning IS development with business needs and seeking strategic advantage from IT with a focus on what should be done. The IT strategy is concerned with technology policies with a focus on how things are done. IM strategy, finally, is “the management framework which guides how the organization should run IS/IT activities” (Earl, 1989, p. 117). In the following discussion, the overarching use of IT strategy is used and not Earl’s narrower definition above.

There has been a plethora of research studies focusing on how to actually carry out SISP (e.g. Lederer and Sethi, 1988, 1996), and different methods have been prescribed (e.g. Kovacevic and Majluf, 1993). Efforts have also gone into evaluating the planning process (King, 1988). There has been significantly less research studying IT strategy content, i.e. the result of the process of developing an IT strategy, than the process itself (Sabherwal and Chan, 2001).
Pyburn (1983) identified three different approaches to linking IS planning to corporate planning:

- **Written formal** is a structured approach primarily based on the interpretation of written business plans usually resulting in written documents.
- **Personal formal** is a partially structured approach relying on personal communication in formal settings such as steering groups. Plans and documents are seen mainly as documentation of meetings.
- The **Personal informal** approach relies on informal discussions and formal documents are, if they exist, perceived as a “paper shuffling burden” (ibid., p. 5).

**Strategic Alignment Model**

A common perspective when discussing IT and business strategies is that these strategies are to be aligned in some way. A wide-spread model describing this is the Strategic Alignment Model. In this model, Henderson and Venkatraman (1993) view strategy as involving both formulation, i.e. “decisions pertaining to competitive, product-market choices” (p. 4), and implementation, i.e. “choices that pertain to the structure and capabilities of the firm to execute its product-market choices” (p. 4). The “alignment” view in general, and the Strategic Alignment Model specifically, has been questioned as it assumes separability between IT and the business (Smaczny, 2001). Instead the concept of fusion has been introduced as a way of better describing the mutual interdependence and interaction between IT and business strategies (Keen, 1993; Smaczny, 2001).

![Strategic Alignment Model](image)

**Figure 3. Strategic Alignment Model (Henderson and Venkatraman, 1993)**

The two main building blocks in the Strategic Alignment Model are strategic fit and functional integration (see Figure 3). Strategic fit concerns the fit between external positioning and the internal capabilities to execute the chosen market-positioning strategy. Functional integration deals instead with the capability of the IT strategy to shape and support the business strategy (strategic integration) and the link between organizational and IS structure and processes (operational integration) (cf. Henderson and Venkatraman, 1993).

As described in Figure 3, the model acknowledges four dominant alignment perspectives:

- **Strategy execution**, where business strategy drives organizational infrastructure, which in turn drives the design of the IS infrastructure.
- **Technology transformation**, where business strategy drives the IT strategy, which then determines IS infrastructure.
- **Competitive potential**, where the IT strategy drives the business strategy, which then drives the organizational infrastructure.
• Service level, where IT strategy drives IS infrastructure, which in turn drives organizational infrastructure.

An (implicit) underlying assumption in the Strategic Alignment Model is that it considers strategies to be plans to be carried out, i.e. it primarily discusses intended strategies.

Too Much Focus on Intended Strategies?

The IT strategy literature often focuses on the strategy per se rather than discussing how the strategy is communicated within the company. There is a distinction to be made between strategy documents and strategic behavior. There seems to be a fairly common underlying assumption that a strategy document leads to strategic behavior (barring bad management), while the lack of a document leads to the absence of strategic behavior. At the same time it can be observed that even though many organizations do have strategic IT plans, these plans are not implemented very extensively (Gottschalk, 1999).

In a study on SISP methodologies it was found that 38% of all projects initiated after the SISP study were not part of the plan and that only 50% of the changes in the IS department recommended by the SISP were carried out (Lederer and Sethi, 1988, p. 455). Cerpa and Verner note that “[Strategic Information Systems Planning] often result in very satisfactory plans, but a lack of management commitment and the absence of the control mechanisms necessary to ensure the success of the plans can impede its implementation” (Cerpa and Verner, 1998, p. 200).

Despite Mintzberg’s impact on strategy research in general, IS strategy research seldom draws on his body of work (Burn, 1993), which goes against Bakos and Treacy’s (1986) advice to use insights from established disciplines. In the light of Figure 2, the focus on intended strategies in works on IT strategies is striking, especially since it has been argued that the “notion of realized strategy is very pertinent to the information systems area where developments in the information industry might make it inappropriate to pursue some intended strategies while others emerge” (Broadbent and Weill, 1993, p. 164). Salmela and Spil (2002) suggests a method for how traditional planning can be combined with more incremental planning, thus allowing for IT strategies of a more emergent character.

Chan, Huff, Barclay and Copeland (1997) are an exception to the fallacy of focusing on intended strategies, as they explicitly set out to assess the realized information systems strategy which refers to a “strategy evident in IS investment decisions and IS deployments, as contrasted with vocalized or documented IS strategy” (Chan et al, 1997, p. 126). This is in line with Venkatraman’s (1989) study of strategic orientation (in general and not IT specific), where strategy is viewed as a pattern of critical decisions.

THE EXISTENCE OF STRATEGIES

The Companies

In a multiple case study on the management of mission-critical IT in the financial industry, IT and business strategies were studied (see Mårtensson, 2003, where also the full cases are included). A total of forty semi-structured interviews were carried out each lasting between 45 minutes and two hours and 45 minutes. To enhance the possibility of relevant inter-case analysis, all cases were collected from the same industry, namely the financial industry.

In line with Eisenhardt’s (1989) reasoning, the case companies were chosen so that the variation will help the understanding of the cases. In this sense, the aim is to cover different ends of the spectrum in some important dimensions. The two dimensions chosen were company complexity and targeted markets segment. Company complexity was used as a composite measure consisting of the two dimensions, sheer size and scope of services offered (e.g. analysis, asset management, corporate finance, trading) resulting in Figure 4.

![Figure 4. Case Company Structure](image-url)

As far as I know there is no written IT strategy. (Head of IT Development, Lambda)
Lambda has no written IT strategy, but it has a strong shared view on how to do things, i.e. there is a plan, or intended strategy, albeit not in a written format. Furthermore, there is no perception of a real distinction between business activities and IT activities, rendering the distinction between business and IT strategy somewhat superfluous. The business strategy is clear, and it is operationalized mainly through the core trading application, which is developed on the basis of input from the Head of IT Development. At Lambda, written IT strategies are primarily seen as a communication tool, which the people at Lambda do not consider necessary in companies as small as theirs.

Who would appreciate you putting 6 months into writing a 50-page document? (IT Project Leader, Delta)

Delta has no written IT strategy. Some work is put into developing a strategy in terms of soft technical guidelines by IT operations. Others, such as IT project leaders, feel it is too time-consuming to keep a strategy updated. The IT department’s weekly meetings serve as an important forum for unifying the department, and there is quite a clear perspective on how things are done and should be done. The intended strategy is formulated and communicated through meetings and interaction rather than documents. A business developer at Delta expresses a concern for lack of top management involvement and commitment when it comes to converting the business strategy into an IT strategy, a task often conceived as important (Earl, 1989; King, 1978; Ward, 1987). When looking at Delta’s behavior over time, there are several patterns in decisions and actions such as sourcing strategies and the continuous efforts put into IT.

Rather than a strategy there is a strong culture. (CFO, Tau)

Tau’s head of IT has developed a strategy for how he wants the IT department to work and to interact with the rest of the organization, i.e. an information management strategy (Earl, 1989). This strategy deals with how the IT personnel should spend their time on different types of activities and not how IT should be used in the business. There are, however, clear patterns in how Tau chooses to use IT. For instance, Tau is never in the forefront when it comes to new technology. Instead, there is an explicit strategy to be a safe, secure alternative. This explicit strategy does not refer to a written strategy, but rather a vivid expression of the business vision and the associated culture. There is a consistent pattern in how Tau adopts new technology, even though there is no written strategy guiding this behavior.

You should check that it’s in line with our strategies early on! (IT Architecture, Gamma)

Gamma has a written IT strategy that was developed in an expressed undertaking a few years ago. The IT strategy, which is owned by a central IT staff group, is based on Gamma’s business strategy, and it consists both of generic guidelines and concrete tasks in a to-do list (e.g. “replace this application”). Of the three users of the IT strategy, two seem uncontroversial, namely management and IT Strategic Control. These two fit the traditional arguments for developing IT strategies (cf. Earl, 1989). The third, external customers, may be more controversial, at least it is not usually covered in the literature. It happens that customers try to gauge the IT activities of Gamma by checking that a written IT strategy actually exists.

Written IT Strategies

In general, interviewees in the study consistently interpreted IT strategies as intended strategies, and more specifically, written documents. The interpretation of developing an IT strategy was that it means producing a written plan in accordance with Lederer and Sethi (1996). As Table 1 illustrates, written IT strategies are not common among the case companies. None of the three smaller case companies, Lambda, Delta and Tau, have written IT strategies. Tau’s strategy is, as discussed above, an information management strategy (Earl, 1989) for how work in the IT department should be carried out. At Gamma, which is considerably larger that the other three companies taken together, there is a written IT strategy.

<table>
<thead>
<tr>
<th>Company</th>
<th>Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lambda</td>
<td>No</td>
</tr>
<tr>
<td>Delta</td>
<td>No</td>
</tr>
<tr>
<td>Tau</td>
<td>Yes (IM strategy)</td>
</tr>
<tr>
<td>Gamma</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 1. Different Forms of Intended Strategies

In light of the existing Strategic Information Systems Planning (SISP) literature, this is somewhat surprising. This literature usually concerns itself with how to carry out SISP, which is typically expected to be documented in some fashion, and not whether to carry it out or not (Lederer and Sethi, 1988, 1996; Kovacevic and Majluf, 1993). Rather, there is often a concern that strategic IS plans are not implemented (Cerpa and Verner, 1998, Gottschalk, 1999).
Non-Written IT Strategies

Does this mean that these IT intensive companies do not have IT strategies? Relaxing the focus on written strategies, it can be argued that they do have strategies, albeit not in the form of written strategies. Smits and van der Poel (1996) found some examples of companies without information strategy documents, even though they did have information strategies. Their finding is supported by the case companies of this study. Their intended strategies tend to take the form of shared views communicated in other ways than through documents, as described in Table 1 above.

Table 2 describes the IS planning practices of the companies in terms of Pyburn’s (1983) three approaches.

<table>
<thead>
<tr>
<th>Company</th>
<th>Shared View</th>
<th>Main Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lambda</td>
<td>Yes</td>
<td>Personal-Informal</td>
</tr>
<tr>
<td>Delta</td>
<td>Yes</td>
<td>Personal-Formal</td>
</tr>
<tr>
<td>Tau</td>
<td>Yes</td>
<td>Personal-Formal / Personal-Informal</td>
</tr>
<tr>
<td>Gamma</td>
<td>Yes, to some extent</td>
<td>Written-Formal</td>
</tr>
</tbody>
</table>

Table 2. Different IS Planning Practices

Perhaps not surprisingly, there is a size correlation, where a larger company is more likely to have a formal approach to IS planning.

A first view could be that the prevailing organizational norms affect choices in a causal relationship. A second view, probably slightly more on the mark, considers this to be a more reciprocal relationship, i.e. the choices made are also actively affecting the organizational norms. A third view, which in some cases is perhaps even more accurate, is that the organizational norms emerge through the choices made. Being a low cost producer is to (and not means that you) choose certain solutions such as proven technologies.

Intended and Realized Strategies

Summing up the empirical results, a key insight is the important difference between having a written IT strategy and having consistency in a stream of IT related actions and decisions. From an IT strategy perspective, it is argued that there is an intended IT strategy, written or not, which contributes to the realized strategy by providing general guidelines and approaches to IT. These guidelines and approaches then provide the setting in which the business strategy is translated into IT decisions and actions, together creating a Realized IT Strategy, see Figure 5 below. In the figure, Mintzberg and Waters’ (1985) typology has been applied to IT strategies instead of generic strategies.

![Figure 5. Types of IT Strategies (adapted from Mintzberg and Waters, 1985)](image)

CONSEQUENCES FOR ALIGNING IT STRATEGIES AND BUSINESS STRATEGIES

Turning so to the alignment of IT and business strategies, it can in light of Mintzberg and Waters’ (1985) model (see Figure 2), be discussed what is really being aligned. Typically, SISP deals with aligning an intended IT strategy with the intended business strategy (Lederer and Mendelow, 1989; Teo and Ang, 1999). Earl (1993) serves as a potential exception as he discusses aligning IT with business needs, without explicating whether this concern needs to be expressed in business plans or realized business needs.
Alignment efforts typically do not focus on realized strategies. Furthermore, explicit discussions of the effect of aligning intended strategies on the alignment of realized strategies seem to be quite rare. The fairly strong belief in organizations’ ability to put plans into action goes back to at least McFarlan (1971) who states that “The most significant factors differentiating the companies that are effective CBIS [computer-based information system] users from those that are not are the quality and content of their written plans” (p. 82). Thus, the leap from the written plan to reality was downplayed somewhat. A more recent example is Teo and Ang (1999), who study critical success factors for aligning IS plans with business plans. Although this is important, it is studied seemingly without consideration of the potential difference between planned and realized strategies.

This belief seems to be planted more firmly in the research on IT strategies as discussed above than in the research on business strategies (e.g. Mintzberg, 1978; Mintzberg and Waters, 1985; Pettigrew, 1985). Overall, the perspective on IT strategy formulation as a rational formal process is omnipresent (cf. Bryson and Currie, 1995) even if there is a second view emphasizing the ad hoc nature of the strategy process (ibid.). In terms of the different schools of strategic management, SISP seems firmly planted in the planning school stemming from Ansoff (1965), characterized by focusing on the planning process, which is seen as decomposable into distinct steps and carried out by planners rather than top executives.

The result of using Mintzberg and Waters’ (1985) model of strategies to combine IT and business strategies is given in Figure 6. From a business strategy perspective the suggested view extends Mintzberg and Waters’ (ibid.) original model by explicitly adding the IT strategy.

The Intended Business Strategy affects the Intended IT Strategy (as indicated by “A” in Figure 6), which is the main, and often the only, focus of traditional SISP literature (e.g. King, 1978; Ward, 1987). However, it can be argued that it also affects the Realized IT Strategy, by contributing to the Emergent IT Strategy (“B”). The Realized IT Strategy then affects, or actually plays an integral part in, the Realized Business Strategy, by contributing to the Emergent Business Strategy (“C”).

Figure 6. Proposed View of Business and IT Strategies

In the Strategic Alignment Model it varies whether IT strategy drives business strategy or vice versa. In Figure 6 this is would be reflected by changing the direction of the arrows. It could be objected that “everything affects everything” in Figure 6, which would be true if the lapse of time is brought into the picture. For example, the realized business strategy at time zero is quite likely to affect the intended business strategy at a later time.

CONCLUDING REMARKS

The traditional approach to strategic alignment in IS-research resembles what in general strategic management is the planning school or positioning school. This is not necessarily a bad thing, but, in contrast with general strategic management, there seems to be a lack of awareness of the underlying assumptions. This is one example of the danger pointed out by Bakos and Treacy (1986) namely creating idiosyncratic theories of the strategic use of information systems. Following their (and others) advice insights from general strategic management, such as the learning school’s distinction between intended and realized strategies, may be quite beneficial for our understanding of strategic alignment.
From a practitioner’s perspective focusing on aligning realized rather than intended strategies reduces the risk of having IT solutions that do not adequately support the business. Focusing on intended strategies also increases the risk of having well-aligned strategies that are in fact not reflected in reality.

Thus, the main idea behind the proposed view in this paper is that there is an important difference between intended strategies and realized ones, and that this difference is important when working with linking IT and business strategies. Too often the focus is on linking an intended IT strategy to an intended business strategy. This is important, but it is also important to acknowledge that this may be very different from having realized strategies that are linked.

REFERENCES